

WHAT IS CLAIMED IS:

1. A transparent laminate comprising:
a transparent substrate;
three or four combination thin-film layers successively
5 laminated on a surface of said transparent substrate, each of
said thin-film layers consisting of a high-refractive-index
transparent thin film and a silver transparent conductive thin
film; and
another high-refractive-index transparent thin film
10 formed on a surface of said combination thin-film layer,
wherein a standard deviation of visible light
transmittance in a wave range of from 450 to 650 nm is not larger
than 5 %.
- 15 2. A transparent laminate according to claim 1,
wherein each of said silver transparent conductive thin films
has a thickness in a range of from 5 to 20 nm, each of the
high-refractive-index transparent thin film located on the
surface of said transparent substrate and the
20 high-refractive-index transparent thin film located in an
outermost layer has a thickness in a range of 20 to 50 nm, and
each of the other high-refractive-index transparent thin films
located in an intermediate region between said
high-refractive-index transparent thin film located on the
25 surface of said transparent substrate and said

high-refractive-index transparent thin film located as the outermost layer has a thickness in a range of 40 to 100 nm.

3. A transparent laminate according to claim 1,
5 wherein each of said silver transparent conductive thin films has an approximately constant thickness in a range of from 5 to 20 nm, each of the high-refractive-index transparent thin film located on the surface of said transparent substrate and the high-refractive-index transparent thin film located in an
10 outermost layer has a thickness $(5/2) \times (1 \pm 0.15)$ times as large as the thickness of each of said silver transparent conductive thin films, and each of the other high-refractive-index transparent thin films located in an intermediate region between said high-refractive-index transparent thin film located on
15 the surface of said transparent substrate and said high-refractive-index transparent thin film located as the outermost layer has a thickness $5 \times (1 \pm 0.15)$ times as large as the thickness of each of said silver transparent conductive thin films.

20

4. A transparent laminate according to claim 1,
further comprising a low-refractive-index transparent thin film formed on said surface of said transparent substrate, said low-refractive-index transparent thin film having a refractive
25 index n_L in a range of from 1.3 to 1.6 and having a thickness

of $550 \text{ nm} \times (1/4n_L) \times (1 \pm 0.15)$.

5. A transparent laminate according to claim 4,
further comprising a low-refractive-index transparent thin
5 film formed on a surface of said high-refractive-index
transparent thin film located as the outermost layer, said
low-refractive-index transparent thin film having a refractive
index n_L in a range of from 1.3 to 1.6 and having a thickness
of $550 \text{ nm} \times (1/2n_L) \times (1 \pm 0.15)$.

10

6. A transparent laminate according to claim 4,
further comprising any one of an anti-reflection film, an
anti-mirroring film and a low-reflection anti-mirroring film
stuck onto said surface of said high-refractive-index
15 transparent thin film located as the outermost layer, through
a transparent adhesive layer.

20

7. A plasma display panel filter comprising a
transparent laminate according to claim 1.

8. A plasma display panel filter comprising a
transparent laminate according to claim 2.

9. A plasma display panel filter comprising a
25 transparent laminate according to claim 3.

10. A plasma display panel filter comprising a transparent laminate according to claim 4.

11. A plasma display panel filter comprising a transparent laminate according to claim 5.

12. A plasma display panel filter comprising a transparent laminate according to claim 6.

10 13. A method for producing a transparent laminate comprising steps of:

preparing a transparent substrate;

depositing a high-refractive-index transparent thin film by a vacuum dry process;

15 depositing a silver transparent conductive thin film by a vacuum dry process;

repeating said steps for depositing the high-refractive-index transparent thin film and the silver transparent conductive thin film three or four times to thereby form three or four combination thin-film layers of the high-refractive-index transparent thin film and the silver transparent conductive thin film successively laminated on a surface of said transparent substrate; and

20

depositing another high-refractive-index transparent thin film on a surface of said combination thin-film layer by

25

the vacuum dry process,

wherein, when said silver transparent conductive thin films are deposited by the vacuum dry process, temperature T (K) of said transparent substrate at the time of the deposition of said films is set to be in a range $340 \leq T \leq 410$.

14. A method for producing a transparent laminate comprising steps of:

preparing a transparent substrate;

10 depositing a high-refractive-index transparent thin film by a vacuum dry process;

depositing a silver transparent conductive thin film by a vacuum dry process;

repeating said steps for forming the

15 high-refractive-index transparent thin film and the silver transparent conductive thin film three or four times to thereby form three or four combination thin-film layers of the high-refractive-index transparent thin film and the silver transparent conductive thin film successively laminated on a surface of said transparent substrate; and

20 depositing another high-refractive-index transparent thin film on a surface of said combination thin-film layer by the vacuum dry process,

wherein, when said silver transparent conductive thin films are deposited by the vacuum dry process, temperature T

(K) of said transparent substrate at the time of the deposition of said films is set to be in a range $340 \leq T \leq 390$, and deposition rate R (nm/sec) of said silver transparent conductive thin films is set to be $R = (1/40) \times (T - 300) \pm 0.5$.

5